DOCUMENT RESUME

ED 310 071 SP 031 322

AUTHOR Schwab, Richard L.
TITLE Stress and the Intern Teacher: An Exploratory Study.
PUB DATE Mar 89
NOTE 24p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, March 27-31, 1989).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143) -- Statistical Data (110)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Beginning Teachers; Cluster Grouping; Cooperating Teachers; Elementary Secondary Education; Higher Education; *Internship Programs; *Program Effectiveness; *Social Support Groups; *Stress Variables; *Teacher Interns
IDENTIFIERS *Extended Degree Programs; *University of New Hampshire

ABSTRACT

This exploratory study provides some baseline information on the effectiveness of the University of New Hampshire's extended teacher education program which, in the fifth year, culminates in a year-long internship. Currently, more than half of the intern placements are in cluser sites, which provide an opportunity for developing school-based support networks for both interns and cooperating teachers. The study sought to determine: (1) interns' levels of stress and satisfaction as they neared the end of their placement; (2) if the internship setting, age of intern, or level of experience of the cooperating teacher had any influence on levels of stress and satisfaction; and (3) if the type of internship placement had any relationship with the development of an effective support network. The results of the study provide information that is useful on two dimensions. The overall positive response to the internship aspect of the program provides one more piece of information to support the adoption of extended programs to prepare teachers. The overall low levels of job-related stress indicate that the supportive yet challenging climate that can be developed over the year helps practice teachers enter their profession on a positive note. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED310071

Stress and the Intern Teacher: An Exploratory Study

Richard L. Schwab, Ph.D

Associate Professor

University of New Hampshire

Department of Education

Morrill Hall

Durham, NH 03824

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R. L. Schwab

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Paper to be presented at the American Educational Research Association Annual Conference, March, 1989, San Francisco, Ca.

Running Head: Stress and the Intern Teacher

SP031582

Stress and the Intern Teacher: An Exploratory Study

Background

Learning to teach is a complex and at times stressful process. The problems individuals face in the transition from being a "student of learning how to teach" to being "an effective teacher" are well documented. Problems which cause stress for student teachers, teaching interns and beginning teachers frequently mentioned in research are: reality shock (when the idealistic expectations of the new teacher conflict with the realities of classroom life), role conflict, role ambiguity, role overload (too much to do and little time to do it), isolation, and lack of practical training in such areas as discipline and curriculum development (Veenman 1984, Schwab and Iwanicki, 1982; Corcoran 1981, 1989; Corcoran and Andrew 1988, Bullough 1989). New teachers unable to cope with the stresses caused by these problems may experience symptoms of job burnout early in their career. Characteristics of job burnout in teaching include chronic feelings of emotional exhaustion and fatigue, the development of negative attitudes toward students and a loss of feelings of accomplishment from teaching (Maslach, Jackson & Schwab 1986). Research by Schwab and Iwanicki (1982) and Gold (1985) found younger teachers experienced these feelings more frequently than older teachers.

New teachers who experience these negative feelings are likely to be less effective in the classroom and eventually leave the profession. In some cases individuals may resolve themselves to staying on the job but detach themselves from responsibility for dealing with the problems they were unable to resolve (Jackson, Schwab, & Schuler, 1986; Dworkin,1987). In any case everyone loses, the system, students and the new teacher.

A major goal of the reform movement in teacher education is to redesign teacher preparation programs so that teachers are better able to handle these stressors in both their practice and first regular teaching assignments. One of the most controversial reforms advocated to address these problems is the establishment of extended teacher preparation programs (Holmes, 1986; Carnegie Foundation,1986). Extended programs (often referred to as five or fifth year programs) require the completion of a bachelors degree in an academic field outside of education and a year long clinical experience dedicated to mastering the complexities of learning how to teach. To date, many teacher training institutions have expended a great deal of energy debating the virtues of extended programs, but few have abandoned undergraduate four year programs to adopt them. One reason for the reluctance to change is that many educators argue that little or no research exists to support the contention that extended programs prepare better teachers. It is also argued that such programs will allow only the most financially able students to pursue teaching as a career (Cherry- Wilkenson 1989, Howey & Zimpher 1986).

A research base has evolved over the last few years that has begun to address these concerns. This research has been conducted at the University of New Hampshire by faculty members involved in their Five Year Teacher Education Program which was implemented in 1973. Studies by Andrew (1983, 1986, 1989); Corcoran (1981);Corcoran and Andrew (1988); and Oja (1988) have indicated that extended programs have several advantages over four year programs. One of the more important findings of these research studies is that graduates over a ten year period have come from more academically talented background and are more likely to stay in teaching than students in traditional four year programs (Andrew,1989).

The UNH program is an integrated program that starts at the undergraduate level and extends into a fifth year. All students must complete broad based general

education education requirements , an academic major outside of education, professional coursework, a graduate concentration in a particular area, and a year long internship in a local school. The Five Year Program culminates in a Master's degree and certification at the elementary or secondary level. Several articles provide an indepth discussion of the program (Andrew 1973, 1983, 1986, Corcoran and Andrew 1988, Schwab, in press).

The year long clinical experience (hereafter referred to as internship) is the focal point of learning how to teach in extended programs. Experience and research has shown that the internship has several advantages over the traditional one semester of student teaching. First , there is more time for the intern to learn about teaching through reflection and supervision from the cooperating teacher and university supervisor. Second, interns are assigned a classroom from the start of the school year to the end, thus gaining the opportunity to witness the growth and development of their students over time. A third advantage is that interns have more opportunity to take supervised risks and experiment with new ideas since they have a year to prove their competence, not fourteen weeks as in the case of student teachers. A fourth benefit is that there is enough time and the opportunity to establish more sophisticated clinical supervision models among school based cooperating teachers and university supervisors. Finally, (though I am sure more exist) there is the opportunity to build support networks among interns to help them handle the stresses involved with learning to teach (Andrew 1989; Corcoran and Andrew 1988; Schwab,in press).

Effective support networks are important factors in helping teachers handle job stress. Studies by Dworkin (1987), Schwab, Jackson and Schuler (1986) and Jackson, Schwab and Schuler (1986) found that teachers that do not have an effective social support network are more likely to experience burnout. Support networks are

groups of people who help the individual by providing emotional sustenance, assistance and resources and feedback in times of need. (Caplan, 1974; Pines, Aronson and Kafry 1981). Pines, Aronson and Kafry (1981) identify six functions that people in a support network serve for the individual. These six functions are:

(1). Listening- People who actively listen without offering advice or making judgements.

(2). Technical appreciation- People who provide appreciation for the work someone does. People serving this function must be seen as an expert in the field and they must be seen as honest and having integrity by the individual.

(3). Technical challenge- People who are more knowledgeable about the job than the individual , and challenge the individual to improve and grow in their profession.

(4). Emotional support- People who will be on the individual's side in a difficult situation even if they don't agree with the individual. Unlike technical support and challenge people outside the job can serve this purpose.

(5). Emotional challenge- People who confront the individual when he or she is not doing his/her best or is complacent. Emotional challenge differs from technical challenge in that people do not have to be experts in the field the individual is in , they only need to be trusted by him or her.

(6). Sharing social reality- People who share similar priorities, values and views.

Social support can emanate from supervisors, co-workers and people outside of the organization. The UNH Five Year program has stressed the development of support networks for interns at all three levels. Efforts to build support networks for interns include mandatory peer observation, peer videotaping and analysis, and attendance at a weekly seminar that is led by the university supervisor. The first half of

the seminar concentrates on individual problem solving which helps to serve the the listener, emotional support,emotional challenge, and shared sense of reality functions of the support group. The second half of the seminar emphasizes what Shulman (1987) refers to as pedagogical content knowledge. During this part of the seminar, the emphasis is on the technical support and challenge functions of the support network. In addition to seminars, university supervisors and cooperating teachers serve various support functions on an individuals basis. Interns are observed in the classroom at least six times a semester and participate in two three-way conferences with the university supervisor and cooperating teacher. To help cooperating teachers develop supervisory skills the university offers a four credit graduate course and workshops in clinical supervision specifically for cooperating teachers.

During the fifteen years that the Five Year program has been in existance, several different approaches to organizing the internship and seminar have been tried and either refined or abandoned. Currently, the placement can be broadly classified into two types, cluster placement and non-cluster placement.

In the most basic sense, a cluster school has at least three interns and opportunities are available for both cooperating teachers and interns to meet on a regular basis. Clusters sites offer greater opportunities for developing school based support networks for both interns and cooperating teachers by allowing both interns and cooperating teachers to built peer support systems on site. In most cluster sites cooperating teachers meet on a regular basis (often during the day while the interns cover their class) to discuss issues relating to the internship and clinical supervision. The university supervisor usually attends these meetings as a resource person and as a link between the university based teacher education program and the cluster site. At the present time all cluster sites are at the elementary level. Though many of our secondary interns are in schools with three or more interns, they do not meet together

or interact on a regular basis. This is because university supervisors have preferred to work with interns in the same discipline. Consequently, interns in the same school will have different supervisors and seminars. Currently more than half of our elementary placements are in cluster placements.

Students not in cluster sites are placed in schools within a forty five minute driving radius of campus. Over the fifteen years that the internship has been in existance, we have developed a good relationship with a cadre of excellent teachers at these schools, many of whom are graduates of the Five Year Program. School districts teachers and administrators are eager to get interns and in some cases offer stipends, thereby providing incentives for attracting the best interns to their schools. Usually only one or two interns end up in these schools. Although these settings make establishing on-site support networks more difficult, we have been reluctant to abandon the sites to wholeheartedly adopt the cluster concept. As many of you know, finding master teachers who are good cooperating teachers is a difficult and time consuming task. In many cases trial and error are the only valid ways to identify these teachers.

Study Design

The exploratory study reported in this paper was designed to provide some base line information on the effectiveness of the internship program. It was developed to determine (a) the interns' levels of stress and satisfaction as they neared the end of their placement. (b) if internship setting, age of the intern or level of experience of the cooperating teacher had any influence on the levels of stress and satisfaction and (c) if the type of internship placement had any relationship with the development of an effective support network. Because research is limited in these areas, the focus of this exploratory study is to generate hypotheses for future research and to provide insights

that may result in changes to the internship. The general research questions that guided this study were:

1. What are the stress levels of interns as they near the end of their year long placement? Do levels vary by type of placement, age of intern, or experiential background of the cooperating teacher?

2. How do interns rate their experiences in the internship as they near completion? Do these ratings vary by age of intern, type of placement, or experiential background of the cooperating teacher?

3. What functions of a social support network do people in the role set of the intern serve? Do cluster placements encourage the development of more effective support networks?

The participants in this study were interns in the University of New Hampshire Five Year Teacher Education Program during the academic year 1988-1989. The survey was administered in midpoint of the second semester of their internship. Interns were asked to complete the surveys anonymously and place them in a sealed business envelope, the envelopes were then returned to author. Eighty two of the 84 interns enrolled in the program completed the survey for a return rate of 98%. A description of the sample is presented in Table 1.

Insert Table 1 about here

The five page survey contained several questions to determine background characteristics of respondents and degrees of satisfaction with various aspects of the internship. The second section of the survey asked respondents to complete the Maslach Burnout Inventory: Educators Edition; a valid and reliable instrument to measure three aspects of educator burnout; Emotional Exhaustion , Depersonalization

and Personal Accomplishment (Maslach,Jackson & Schwab, 1986) The final section contained questions adapted from Pines, Aronson and Kafry's (1981) instrument to access functions of an individual's support network. Though the instrument has face validity, caution will be taken in reporting findings using this instrument since validity and reliability information were not available.

The subgroups used in the following analyses were categorized as follows:

Age: The categories were based on the author's ten years of experience of working with the internship.

Group one- Twenty one to 24 years of age. Interns were grouped this way because it is likely that they are entering the five year program directly out of undergraduate school.

Group two- Twenty five to 30 years . This group has likely spent some time after college gaining experience in some occupation or entered college after limited outside experience. They are not yet at the point of a major career change.

Group three- Thirty years and older- This group most likely represents adults seeking career changes and/or women who are returning to finish studies after starting families

Cluster placement versus non cluster placement:

Group one- Interns who are in cluster placements at the elementary school level (minimum of three interns per school).

Group two- All other elementary interns not placed in clusters.

Experiential background of cooperating teacher

Group one- First year cooperating teachers

Group two- Cooperating teachers who have had one previous intern

Group three- Cooperating teachers who have had 2 or more interns.

Findings

The first research question addressed the stress levels of interns. Table 2 shows the subscale scores for the Maslach Burnout Inventory; Educator's Edition (MBI:ED). The first scale, Emotional Exhaustion indicates the frequency that interns feel emotional exhausted and drained from teaching. The second subscale, Depersonalization measures attitudes toward students. The third subscale, Personal Accomplishment indicates the frequency that the person feels a sense of accomplishment from their work. A person experiencing burnout will score high on the Emotional Exhaustion and Depersonalization subscales and low on Personal Accomplishment.. As shown on Table 2 interns score much lower on Emotional Exhaustion and Depersonalization and higher on Personal Accomplishment than teachers in the national sample. This clearly indicates that interns are experiencing very low levels of job related stress as measured by this inventory. The MBI:ED also has range scores based on the national norms. Interns are in the average range for Emotional Exhaustion, and low range for Depersonalization and Personal Accomplishment.

Insert Table 2 about here

Table 3 presents the results of one-way analysis of variance for age, internship placement and experience of cooperating teachers. As one can see there are no significant differences at the conventional $p \leq .05$ level of significance. One can only hypothesize why no differences were found. First, since interns are experiencing very low levels of burnout there is not much variance to explain. Second, other factors not examined, such as responsibilities outside the internship (i.e. family responsibilities),

relationships with cooperating teachers, and amount of financial support may be better predictors. The third possible reason may be due to the small cell size that emerges when the groups are formed thus making significance levels very difficult to attain.

Insert Table 3 about here

Since the purpose of this study is to generate hypotheses for future studies a higher significance level or simple trends could be used to generate questions (Borg & Gall,1983). Given this assumption one can make some interesting observations. First, elementary interns in cluster placements have lower levels of emotional exhaustion than elementary interns not in cluster placements ($p=.09$). This score moves the cluster placement group from the average range to the low range in Emotional Exhaustion. A second observation is that the interns right out of undergraduate programs and those over thirty feel the greatest amount of personal accomplishment from teaching. A third observation is that interns working with cooperating teachers that have had the most experience have lower levels of personal accomplishment ($p=.11$). This lower score is enough to move this group from the low range up to the average range for this aspect of burnout.

The second research question addressed general attitudes toward the internship and seminar. In general interns viewed their intern experience very positively. Fifty six percent rated their internship experience as excellent,39% rated it as good, 4% rated as fair, and no one (0) rated it as poor. The seminar component of the internship was viewed somewhat more mixed but still on a positive note. Thirty three percent rated their seminar as excellent, 51% good, 13% fair, and 1% poor.

Table 4 presents the results of one-way analysis of variance that looked for relationships between age, internship setting , experience level of the cooperating teacher and satisfaction with the internship and seminar. Again no significant differences were found using $p \leq .05$. As in the previous question 95% of the interns rate their internship experience as good or excellent which makes for very little variance to explain. Since none of the significance levels was near $p \leq .10$ level it is difficult to detect trends as we were able to in the first question.

Insert Table 4 about here

The third research question addressed the issue of whether the functions of a support group are better enhanced by cluster placement of interns. Table 5 again shows no significant differences among groups but it does show some interesting trends. Though the differences overall are slight the mean scores for each function of the support group are higher for cluster placements. The two areas where the most significant differences occur are in technical challenge and emotional challenge categories.

Insert Table 5 about here

Conclusion

The results of this study provide information that is useful on two dimensions. The overall positive response to the internship aspect of the UNH program provides one more piece of information to support the adoption of extended programs to prepare teachers. The overall low levels of job related stress indicate that the

supportive, yet technically challenging climate that can be developed over the year has achieved its goal of helping practice teachers enter their profession on a positive note. These findings support those found by Andrew (1989) in a follow-up study of ten years of graduates from the Five Year program. His study found that ninety two (92%) of graduates take teaching jobs and seventy five percent (75%) of them stay in teaching five years or more. These statistics are much higher than found in studies that have looked at teacher entrance to the profession and retention rates across the country (Benton,1985; Geer,1966; Mark & Anderson,1977).

To add more credibility to the findings that the year long internship is more successful at helping new teachers handle job related stress a future study should take a relatively similar group of student teachers near the end of their placement and compare their scores on the MBI:ED with those found in this study. Another needed study would be to follow interns into the first two years of their regular teaching positions to compare their ability to handle job related stress with that of student teachers. In such a study great care would have to be made in controlling for organizational conditions as these have been linked to burnout levels in the previous research (Jackson, Schwab, & Schuler, 1986; Schwab,1983; Maslach, Jackson and Schwab,1986). One way to control for this is to use individual schools as the unit of analysis as advocated by Hubert and Iwanicki (1989).

The results of this study also offer information that is useful for universities that have begun to implement five year programs and are designing their clinical experiences. This study has shown that interns in cluster placements experience lower levels of emotional exhaustion and fatigue and have the opportunity to develop more effective support networks. From the university's perspective it is much easier for supervisors to spend time in schools if they do not have to travel great distances between placements. It is also possible to build a better rapport with cooperating

teachers if you can work with them in their schools on a more regular basis. However, developing effective cluster sites requires more than just placing three or more interns in the same school.

Cluster sites must be developed in collaboration with the administrators and cooperating teachers if they are to succeed. Consequently each develops its own personality, reflecting the nature of the school organization and philosophical outlooks of teachers and administration. Oja (1988) found that although cluster sites were unique they did share some common traits. Among the most important were:

(a) time is made available for cooperating teachers to meet together

(b) the university supervisor and cooperating teacher collaborate in making decisions that directly affect the intern

(c) emphasis is placed on making a good match between the cooperating teacher and intern in the placement process

(d) the university supervisor acts as a liaison between the school and the university teacher education program.

While the cluster placement concept is hard to find fault with, there are factors that need to be overcome before moving in that direction. First the university supervisors working with interns placed on the secondary level will need to be more amenable to supervise more than one discipline. In all but our largest high schools it is very difficult to place three or more interns in a single academic department and expect to make good matches between cooperating teachers and interns. Since interns in extended programs all have a strong background in their subject area, the seminar can be designed to focus on pedagogical knowledge and application that is applicable to all disciplines.

A second issue blocking cluster placement is that many of our interns are financially strapped. School districts are often able to find money to provide stipends

for one or two interns per district but funding three or more per school is next to impossible. Our experience in the past has been that having paid and unpaid interns in the same school is not a good idea because a two class citizen of intern develops. Until states, local schools or the federal government provide funding to support interns, it is unlikely that a five year program will be able to totally abandon placing individual interns in schools except in our large urban and suburban schools..

In summary, this study has also raised some additional research questions that need examination. Two of these are raised by the findings in the Personal Accomplishment aspect of job burnout . These questions are:

(a) Do interns with who are working with the most experienced cooperating teachers experience lower feelings of accomplishment from their work? If so why?

(b) Do interns in the 24 to 29 year old age bracket experience lower levels of personal accomplishment.? If so why?

A number of questions not examined in this study may also be interesting for future investigations. Among the more important are:

(a) Are interns more likely than student teachers to develop and maintain support networks on their own when they enter full time teaching?

(b) Are interns more likely to have more positive attitudes toward supervision activities once they are in their first full time teaching assignments?

(c) Can support groups be developed during the student teaching experience that have the same long term effects as those in the internship?

The development of extended programs in teacher education is one of the most positive outcomes of the reform movement in education. While research has begun to provide information that will help both program planners and those already involved in extended programs much more is needed. Hopefully, this study has helped to provide some potential areas of inquiry.

TABLE 1

Description of Sample

N = 82

Interns

Sex		Age		Grade Level Taught	
male:	24.4%	mean:	27.6	elementary:	52.4%
female:	75.6%	median:	24	middle/jr. high:	13.4%
		mode:	22	high school:	34.1%
		range:	21-52		

Experience Level of Cooperating Teacher

Years of experience as a classroom teacher:	mean:	14.48 years
	median:	15 years
	mode:	15 years
	range:	3-40 years
Previous experience as cooperating teacher with interns:	first time:	43.6%
	one before:	20.5%
	two or more	35.9%

TABLE 2

Intern Levels of Perceived Burnout Compared with National Teacher Norms

Factors	Interns mean (N = 82)	National Teachers mean (N = 4, 163)
Emotional Exhaustion	18.30	21.25
*range	average	average
Depersonalization	3.52	11.00
*range	low	average
Personal Accomplishment	39.09	33.54
*range	low	average

* National means and range scores from: Maslach Burnout Inventory: Educators Edition Manual (Maslach, Jackson & Schwab, 1986).

TABLE 3

One-way Analysis of Variance of Selected Background Variables and Frequency of Perceived Burnout

Variable	Groups	Group Means	Anova F	Sig. Level
		Emotional Exhaustion		
Age	21-23 years	17.59	.19	.82
	24-29 years	18.52		
	30-plus	19.44		
Internship Setting	cluster	14.56	2.9	.09
	non-cluster	19.62		
Experience of cooperating	first intern	19.31	.39	.68
	one other	16.92		
teacher	two or more	18.52		
		Depersonalization		
age	21-23 years	3.94	.09	.90
	24-29	3.48		
	30-plus	3.78		
Internship setting	cluster	2.87	.04	.95
	non-cluster	2.80		
Experience of cooperating teacher	first intern	4.18	.71	.49
	one other	2.96		
	two or more	3.67		
		Personal Accomplishment		
age	21-23	40.2	2.28	.11
	24-29	36.86		
	30-plus	39.58		
Internship setting elem	cluster	38.7	1.21	.28
	non-cluster	40.70		
Experience of cooperating teacher	first intern	39.54	1.86	.16
	one other	39.9		
	two other	36.77		

TABLE 4

Oneway Analysis of Variance for Background Variables and Internship and Seminar Satisfaction

Variable	Groups	Group Means	Overall Means	Anova F	Sig. Level
*Overall Internship Satisfaction					
Age	21-23	1.34	1.46	1.24	.29
	24-29	1.53			
	30-plus	1.55			
Internship Setting	cluster	1.44	1.47	.26	.61
	non-cluster	1.53			
Experience of Cooperating Teacher	first intern	1.38	1.46	.97	.38
	one other	1.62			
	two or more	1.46			
*Satisfaction with Seminar					
Age	21-23	1.81	1.81	1.32	.27
	24-29	1.96			
	30-plus	1.61			
Internship Setting	cluster	2.00	1.90	.49	.49
	non-cluster	1.84			
Experience of Cooperating Teacher	first intern	1.85	1.84	.64	.53
	one other	2.00			
	two or more	1.75			

*Ratings: 1 = Excellent; 2 = Good; 3 = Fair; 4 = Poor.

TABLE 5

Functions of a Support Group by Cluster and Non-Cluster Groups

Groups	Group Means	Overall Means	Anova F	Sig. Level
Listener				
Non-cluster (N = 15)	20.53	20.76	.08	.77
Cluster (N = 23)	20.92			
Technical Appreciation				
Non-cluster (N = 15)	20.00	20.29	.07	.79
Cluster (N = 23)	20.45			
Technical Challenge				
Non-cluster (N = 15)	17.57	18.80	1.52	.23
Cluster (N = 23)	19.59			
Emotional Support				
Non-cluster (N = 15)	19.60	20.38	.76	.39
Cluster (N = 23)	20.87			
Emotional Challenge				
Non-cluster (N = 15)	15.38	16.8	1.56	.22
Cluster (N = 23)	17.64			
Shared Sense of Reality				
Non-cluster (N = 15)	21.20	21.29	.01	.91
Cluster (N = 23)	21.34			

References

Andrew, M. D. (1974). Teacher leadership: A model for change, Washington, DC Association of Teacher Educators. (ERIC No. ED 096288).

Andrew, M. D. (1981). A five-year teacher education program: Successes and challenges. Journal of Teacher Education, 32(3), 41-43.

Andrew, M. A. (1989). Entry and retention of graduates in a five year teacher education program. University of New Hampshire, Education Department, Durham, NH. Manuscript submitted for publication.

Andrew, M. D. (1983). The characteristics of students in a five-year teacher education program. Journal of Teacher Education, 34, (1), 20-23.

Andrew, M. D. (1986). Restructuring teacher education: The University of New Hampshire's five-year program. In Lasley, T. J. (Ed). The Dynamics of Change in Teacher Education, Volume 1. Background papers from the National Commission on Excellence in teacher education. (AACTE-ERIC Teacher Education Monograph No. 5.)

Benton, C. J. (1985, April). Predicting occupational persistence: A comparison of teachers and five other occupational groups. Paper presented at the Annual Meeting of the American Educational Research Association.

Borg, W. R., & Gall, M. D. (1983). Educational research: An introduction, Longman; NY.

Bullough, R. L. (1989). First year teacher: A case study, Teachers College Press, NY.

Caplan, G. (1974). Social support systems and community mental health. Behavioral Publications, New York.

Carnegie Forum on Education and the Economy. (1986). A nation prepared: Teachers for the 21st Century. Author.

Cherry-Wilkinson, L. (1988). Prospects for graduate preparation of teachers. In A. Woolfolk (Ed.). Beyond the debate: Research perspectives on the graduate preparation of teachers, Englewood, NJ: Prentice-Hall.

Corcoran, E. (1989). Critical issues for intern teachers during the clinical experience. Paper presented at the American Educational Research Association Annual Conference, San Francisco, CA.

Corcoran, E. (1981). Transition shock: The beginning teacher's paradox. Journal of Teacher Education, 32(3), 19-24.

Corcoran, E. & Andrew, M. (1988). A full year internship: An example of school/university collaboration. Journal of Teacher Education, 39(3), 17-35.

Dworkin, A. G. (1987). Teacher burnout in the public schools. State University of New York Press of Albany.

Geer, B. (1966). Occupational commitment and the teaching profession. School Review, 74, 31-47.

Gold, Y. (1984). The factorial validity of the Maslach Burnout Inventory in a sample of California elementary and junior high school classroom teachers. Educational and Psychological Measurement, 44, 1009-1016.

Gold, Y. (1985). The relationship of six personal and life history variables to standing on three dimensions of the Maslach Burnout Inventory in a sample of elementary and junior high school teachers. Educational and Psychological Measurements, 45, 377-387.

Holmes Group. (1986). Tomorrow's teachers: A report of the Holmes Group, East Lansing, MI: Author.

Howey, K. R. & Zimpher, N. L. (1986). The current debate on teacher preparation. Journal of Teacher Education, 37(5), 41-49.

Hubert, J. Gable, R.& Iwanicki, E. F. (1989). The relationship of school organizational health.to teacher stress. Bacharach S. B., Conley, S. & Cooper, B (ed). Advances in research and theories of school management, Vol. 1, JAI Press, CT.

Iwanicki, E. F., & Schwab, R. L. (1981). A cross-validational study of the Maslach Burnout Inventory. Educational and Psychological Measurement, 41, 1167-1174.

Jackson, S. E., Schwab, R. L., & Schuler, R. A. (1986). Toward an understanding of the burnout phenomenon. Journal of Applied Psychology, 71(4), 630-639.

Mark, J. L., & Anderson, B. D. (1977). Teacher survival rates: A current look. American Educational Research Journal, 15(3), 379-383.

Maslach, C., Jackson, S. E., with Schwab, R. L. (1986). The Maslach Burnout Inventory Manual. Consulting Psychologists Press, Palo Alto, CA.

Oja, S. N. (1988). A collaborative approach to leadership in supervision. Final Report to the Office of Educational Research and Improvement. U. S. Department of Education.

Pines, A., Aronson, E., & Kafry. (1981). Burnout: From tedium to personal growth. New York: Free Press.

Schwab, R. L. (1983). Teacher burnout: Moving beyond psychobabble. Theory into Practice, 22(1), 21-25.

Schwab, R. L., & Iwanicki, E. F. (1982). Who are our burned out teachers?" Educational Research Quarterly, 7(2), 5-16.

Schwab, R. L., Jackson, S. E., & Schuler, R. A. (1986). Educator burnout: Sources and consequences. Educational Research Quarterly, 10(3), 14-29.

Schulman, L. S. (1987). Knowledge and teaching: Foundations of the new reform. Harvard Educational Review, Vol. 57, NII.